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Epidemiologic Notes and Reports

Prevalence of Smoke Detectors in Private Residences — DeKalb County, Georgia, 1985

To estimate the prevalence of smoke detectors in private residences in DeKalb County, Georgia (one of the several counties comprising greater Atlanta), and to ascertain factors associated with ownership, CDC conducted a county-wide random-digit-dialing telephone survey in July 1985 in cooperation with the DeKalb County Department of Public Safety, Fire Services, and the Georgia Department of Human Resources. Information requested included the following: whether a smoke detector was owned and installed; reasons for not owning a smoke detector; methods of testing the detector; residential and demographic characteristics of the respondent; and other data related to fire safety and prevention.

Interviews were conducted only if an adult household member (18 years of age or older) was available and if the household was a private residence. From a sampling frame including all phone numbers with DeKalb County prefixes, 2,477 numbers were randomly selected and called at least twice during one evening; 626 (25.3%) of these were eligible for inclusion. An additional 1,086 (43.8%) numbers were ineligible (due to nonworking numbers, business phones, or other reasons), and no one answered at 765 (30.9%) numbers. Of the 626 eligible residents contacted, 435 completed interviews.

Later, a random subsample of nonrespondent numbers was called up to 10 times to determine the characteristics of persons not reached in the original survey. Two-thirds of the numbers not contacted during the original survey were ineligible. Results of the callback survey were similar to those of the original survey for smoke detector ownership and other demographic characteristics (Table 1). Moreover, the original survey showed demographic characteristics similar to those based on U.S. Census Bureau data.

The prevalence of reported smoke detector ownership was 76.3%—comparable to the national average—although nearly 5% (15/332) of owned detectors were not reported to be installed (Table 1). Over half (57.9%) of the respondents reported owning fire extinguishers, and 65.7% also indicated having a fire escape plan for their dwelling.

Smoke Detectors – Continued

In dwellings under 10 years old, 89.9% had smoke detectors, compared with 71.8% in dwellings 10 years old or older (Table 2). Dwellings with residents over 65 years of age had an 18.3% lower prevalence of smoke detector ownership (64.1%) than those not so characterized (78.5%).

Nearly 85% of residents owning fire extinguishers also owned smoke detectors, while 64.8% of residents without fire extinguishers owned smoke detectors. Households in which the respondent believed that smoke detectors save lives were over twice as likely than other households to own smoke detectors (77.9 compared with 33.3%).

Characteristics not significantly associated with smoke detector ownership included sex and race of respondent, education level of head of household, ownership of dwelling, presence of a child 5 years of age or younger, a smoker in residence, type of dwelling, and a fire escape plan.

Although 121 (37.9%) of 319 of the sample of smoke detector owners tested their detectors at least once a month, 19.7% said they had never tested the devices. The remaining 47.3% of owners tested theirs less than once a month. The most frequently used manner of testing (40.3%) was by activating a button on the detector. Another 27.3% of respondents tested the detector by smoke challenge; 16.9% used both methods. The remaining respondents who tested used other methods. In a nonrandom home inspection follow-up of 10.6% of the original phone survey responders, nearly 30% of the owners had nonfunctioning smoke detectors, although they reported having an installed detector in their home.

The most common reasons for not owning smoke detectors were: "keep forgetting/putting off" (51.5%); "no interest/never thought about it" (37.8%); "not my responsibility" (24.0%); and "cost" (15.8%).

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TABLE 1. Characteristics of smoke detector survey sample and callback subsample — DeKalb County, Georgia, July 1985

Characteristic	Primary survey No.	Primary survey (%)	Callback subsample No.	Callback subsample (%)	Dekalb County 1980 U.S. Census (%)
Race of respondent: white	286	(65.7)	16	(72.7)	71.4
Education of respondent					
> high school	323	(74.3)	17	(77.3)	76.9
Child ≤ 5 yrs. old in dwelling	108	(24.8)	5	(22.7)	
Resident ≥ 65 yrs. old in dwelling	54	(12.4)	2	(9.1)	
Type of residence: "house"	301	(69.2)	14	(63.6)	
Dwelling > 10 yrs. old	297	(68.3)	17	(77.3)	68.7
Smoker in dwelling	191	(43.9)	9	(40.9)	
Smoke detector present in dwelling (1 or more)	332	(76.3)	18	(81.8)	
Installed smoke detector present in dwelling	317	(72.9)	18	(81.8)	
Fire extinguisher in dwelling	252	(57.9)	13	(59.1)	
Fire escape plan made	286	(65.7)	13	(72.7)	
Median age of respondent (yrs.)	28.0		33.5		29.1
Median no. residents per dwelling	3.0		2.5		2.8
Total	**435**	**(100.0)**	**22**		**483,024**

Smoke Detectors — Continued

Resources; JR Hall, Jr, PhD, Fire Analysis Div, National Fire Protection Association, Quincy, Massachusetts; Div of Injury Epidemiology and Control, Center for Environmental Health, Div of Nutrition, Center for Health Promotion and Education, Div of Surveillance and Epidemiologic Studies, Epidemiology Program Office, Epidemic Intelligence Service Class of 1985, CDC.

Editorial Note: Every year in the United States, more than 4,000 deaths and 20,000 injuries result from residential fires (*1*). Many of these deaths and injuries occur at night while the victims are asleep and result from smoke and gas inhalation rather than flames. A study of deaths due to house fires in 1980, for example, showed that 66% were attributable to carbon monoxide or unspecified fumes (*2*).

Smoke detectors are a reliable method of awakening people before air becomes unbreathable from the buildup of smoke, carbon monoxide, and other toxic gases (*3*). Thus, these devices should allow more people to escape uninjured from house fires. The U.S. Fire Administration's National Fire Incident Reporting System (NFIRS) has estimated that a person who has a home fire and does not have a detector is twice as likely to die in that fire as a person protected by detectors (*4*).

The prevalence of smoke detectors in the United States. has been steadily increasing since the early 1970s, when only about 5% of households had them (*4*). By 1985, an estimated 75% of households had at least one smoke detector. Similarly, during 1978-1984, deaths from house fires dropped more than 30%, from 6,015 to 4,075. This decline is attributed in part to recent home fire safety efforts, including the passage of numerous state laws requiring the installation of smoke detectors (*1*). However, significant differences in the level of ownership among geographic regions exist. States in the South, for example, have the lowest prevalence of smoke detector ownership, although they have the highest fire fatality rates (*4*).

Results from this study suggest that, although many households have a smoke detector, adequate protection by these devices may be overestimated. Nonoptimal protection can be inferred from several findings: (1) 15 (4.5%) of the 332 households with smoke detectors did not have them installed; (2) 19.7% of owners never tested their smoke detectors, and on inspection, nearly 30% of the installed detectors were nonfunctioning; and (3) households with at least one smoke detector may not have all the smoke detectors needed or may have them improperly placed.

TABLE 2. Factors significantly associated with smoke detector ownership — Dekalb County, Georgia, July 1985

Characteristic	Response	Prevalence*	(%)	Prevalance ratio	p value
Age of dwelling	< 10 yrs. old	98/109	(89.9%)	1.25	< 0.001
	≥ 10 yrs. old	212/295	(71.8%)		
Resident ≥ 65 yrs. old in dwelling	yes	34/53	(64.1%)	0.82	< 0.033
	no	295/376	(78.5%)		
Fire extinguisher in dwelling	yes	213/251	(84.9%)	1.31	< 0.001
	no	116/179	(64.8%)		
Respondent believes smoke detectors save lives	yes	321/412	(77.9%)	2.34	< 0.006
	no	3/9	(33.3%)		

*Number of respondents with smoke detectors divided by total number of respondents characterized by each value (excludes "don't know" category).

Smoke Detectors — Continued

Finally, death rates from house fires are highest among older persons. This study also suggests that, even if the overall level of smoke detector prevalence in a community is high, this high-risk subgroup has a lower rate of ownership than other groups in DeKalb County. Results from a recent study suggest that the elderly, the poor, people who did not finish high school, and other groups at high risk of dying in a fire have been less likely to obtain detectors (*4*). Nonwhite households also have a lower prevalence of detectors than white households (*5*). (The differences in percentage of detector ownership by race and by education level of the head of the household in the national study were not found in the DeKalb County study; this may have been due to the size of the sample compared with the national surveys.)

Smoke detector protection should be a component of any community injury-control program, especially for older persons and other high-risk groups. It is inadequate to limit such a program solely to handing out smoke detectors. Proper installation and frequent testing are necessary to ensure adequate protection. Also, an important component is educating individuals on how best to use the extra escape time provided by their detectors. This includes not only creating an escape plan to be used in a fire, but also rehearsing that plan (*4*).

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Current Trends

Diagnosis and Management of Mycobacterial Infection and Disease in Persons with Human T-Lymphotropic Virus Type III/ Lymphadenopathy-Associated Virus Infection

In 1985, the number of new tuberculosis cases reported to CDC was essentially the same as that reported in 1984 (*1*). In contrast, the average annual decline in morbidity during the past 32 years has been 5%. The failure of tuberculosis morbidity to decline as expected in 1985 is probably related to the occurrence of tuberculosis among persons with acquired immunodeficiency syndrome (AIDS) or human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV/LAV)* infection. Several reports have indicated that mycobacterial disease is common among AIDS patients and among persons at risk for AIDS (*2-9*). The most common mycobacterial species isolated from patients with diagnosed AIDS is *Mycobacterium avium* complex (MAC), although in some groups in which tuberculous infection is highly prevalent, disease caused by *M. tuberculosis* is more common (*10-12*). Even among

*The Human Retrovirus Subcommittee of the International Committee on the Taxonomy of Viruses has proposed the name human immunodeficiency virus (HIV) for this virus (Science 1986;232:697).

HTLV-III/LAV – Continued

groups in which MAC is the most common mycobacterial pathogen, *M. tuberculosis* accounts for a substantial proportion of the mycobacterial isolates. The association between mycobacterial disease and AIDS raises several important clinical and public health issues that are addressed below.

DIAGNOSIS OF TUBERCULOSIS IN PATIENTS LIKELY TO HAVE HTLV-III/LAV INFECTION

Clinicians should consider the diagnosis of tuberculosis in patients with, or at risk of, HTLV-III/LAV infection, even if the clinical presentation is unusual (*4,13,14*). Available data indicate that extrapulmonary forms of tuberculosis, particularly lymphatic and disseminated (miliary), are seen much more frequently among patients with HTLV-III/LAV infection than among those without such infection. Pulmonary tuberculosis in patients with HTLV-III/LAV infection cannot readily be distinguished from other pulmonary infections, such as *Pneumocystis carinii* pneumonia, on the basis of clinical and radiographic findings. Patients with tuberculosis may have infiltrates in any lung zone, often associated with mediastinal and/or hilar lymphadenopathy. Cavitation is uncommon. Appropriate specimens to establish a culture-confirmed diagnosis of tuberculosis include respiratory secretions, urine, blood, lymph node, bone marrow, liver, or other tissue or body fluid that is indicated clinically. All tissue specimens should be stained for acid-fast bacilli and cultured for mycobacteria. In the presence of undiagnosed pulmonary infiltrates, bronchoscopy with lavage and transbronchial biopsy (if not contraindicated) may be needed to obtain material for both culture and histologic examination. A tuberculin skin test should be administered, but the absence of a reaction does not rule out the diagnosis of tuberculosis because immunosuppression associated with HTLV-III/LAV infection may cause false-negative results.

TREATMENT OF MYCOBACTERIAL DISEASE IN A PATIENT WITH HTLV-III/LAV INFECTION

Chemotherapy should be started whenever acid-fast bacilli are found in a specimen from a patient with HTLV-III/LAV infection and clinical evidence of mycobacterial disease. Because it is difficult to distinguish tuberculosis from MAC disease by any criterion other than culture, and because of the individual and public health implications of tuberculosis, it is important to treat patients with a regimen effective against tuberculosis. With some exceptions, patients with tuberculosis and HTLV-III/LAV infection respond relatively well to standard antituberculosis drugs (*15*); however, their treatment should include at least three drugs initially, and treatment may need to be longer than the standard duration of 9 months (*16*). The recommended regimen is isoniazid (INH), 10-15 mg/kg/day up to 300 mg/day; rifampin (RIF), 10-15 mg/kg/day up to 600 mg/day; and either ethambutol (EMB), 25 mg/kg/day, or pyrazinamide (PZA), 20-30 mg/kg/day. The last two drugs are usually given only during the first 2 months of therapy. The addition of a fourth drug may be indicated in certain situations, such as central nervous system or disseminated disease or when INH resistance is suspected. An initial drug-susceptibility test should always be performed, and the treatment regimen, revised if resistance is found to any of the drugs being used. The appropriate duration of treatment for patients with tuberculosis and HTLV-III/LAV infection is unknown; however, it is recommended that treatment continue for a minimum of 9 months and for at least 6 months after documented culture conversion. If INH or RIF is not included in the treatment regimen, therapy should continue for a minimum of 18 months and for at least 12 months following culture conversion. After therapy is completed, patients should be followed closely, and mycobacteriologic examinations should be repeated if clinically indicated.

HTLV-III/LAV – Continued

Some clinicians would take a different approach to treatment than that outlined above, to cover the possibility of MAC disease. Although the clinical significance and optimal therapy of MAC disease in these patients is not well defined, and there are no definitive data on the efficacy of treatment, one regimen commonly used to treat MAC disease substitutes rifabutin (ansamycin LM 427) for rifampin, combined with INH, EMB, and clofazimine. Rifabutin and clofazimine are experimental drugs available to qualified investigators only under investigational new drug protocols. Rifabutin is distributed by the CDC Drug Service (telephone: [404] 329-3670), and clofazimine, by Ciba-Geigy: (telephone: [201] 277-5787). If *M. tuberculosis* is isolated from a patient receiving this four-drug regimen, treatment should be switched to one of the three-drug regimens outlined above (INH, RIF, and EMB or PZA). If MAC is isolated from a patient who has been started on a three-drug regimen, the clinician may continue the three-drug regimen or switch to the four-drug regimen of INH, EMB, rifabutin, and clofazimine.

Although experience is very limited, patients with disease due to *M. kansasii* should respond to INH, RIF, and EMB. Some clinicians advocate the addition of streptomycin (SM), 1 gram twice weekly, for the first 3 months. Therapy should continue for a minimum of 15 months following culture conversion.

Monitoring for toxicity of antimycobacterial drugs may be difficult for patients who may be receiving a variety of other drugs and may have other concomitant conditions. Because hepatic and hematologic abnormalities may be caused by the mycobacterial disease, AIDS, or other drugs and conditions, the presence of such abnormalities is not an absolute contraindication to the use of the treatment regimens outlined above.

INFECTION CONTROL

Recommendations for preventing transmission of HTLV-III/LAV infection to health-care workers have been published (*17*). In addition, infection-control procedures applied to patients with HTLV-III/LAV infection who have undiagnosed pulmonary disease should always take the possibility of tuberculosis into account. This is especially true when diagnostic procedures, such as sputum induction or bronchoscopy, are being performed. Previously published guidelines for preventing tuberculosis transmission in hospitals should be followed (*18*).

CONTACT INVESTIGATION FOR TUBERCULOSIS

Patients with pulmonary tuberculosis and HTLV-III/LAV infection should be considered potentially infectious for tuberculosis, and standard procedures for tuberculosis contact investigation should be followed (*19*). Specific data on the infectiousness of tuberculosis in patients with HTLV-III/LAV infection are not yet available.

EXAMINING HTLV-III/LAV-INFECTED PERSONS FOR TUBERCULOSIS AND TUBERCULOUS INFECTION

Individuals who are known to be HTLV-III/LAV seropositive should be given a Mantoux skin test with 5 tuberculin units of purified protein derivative as part of their clinical evaluation. Although some false-negative skin test results may be encountered in this setting as a result of immunosuppression induced by HTLV-III/LAV infection, significant reactions are still meaningful (*20*). If the skin test reaction is significant, a chest radiograph should be obtained, and if abnormalities are detected, additional diagnostic procedures for tuberculosis should be undertaken. Patients with clinical AIDS or other Class IV HTLV-III/LAV infections (*21*) should receive *both* a tuberculin skin test and a chest radiograph because of the higher probability of false-negative tuberculin reactions in immunosuppressed patients.

EXAMINING PATIENTS WITH CLINICALLY ACTIVE TUBERCULOSIS OR LATENT TUBERCULOUS INFECTION FOR HTLV-III/LAV INFECTION

As part of the evaluation of patients with tuberculosis and tuberculous infection, risk factors for HTLV-III/LAV should be identified. Voluntary testing of all persons with these risk fac-

HTLV-III/LAV – Continued

tors is recommended (*22*). In addition, testing for HTLV-III/LAV antibody should be considered for patients of all ages who have severe or unusual manifestations of tuberculosis. The presence of HTLV-III/LAV infection has implications regarding treatment (see above), alerts the physician to the possibility of other opportunistic infections, and allows for counselling about transmission of HTLV-III/LAV infection (*23*). Testing for HTLV-III/LAV antibody is especially important for persons over age 35 with *asymptomatic* tuberculous infection, because INH would not usually be indicated for persons in this age group unless they are also HTLV-III/LAV seropositive.

PREVENTIVE THERAPY

HTLV-III/LAV seropositivity in a person of any age with a significant tuberculin reaction is an indication for INH preventive therapy (*16*). Although it is not known whether INH therapy is as efficacious in preventing tuberculosis in HTLV-III/LAV-infected persons as in other groups, the usually good response of HTLV-III/LAV-infected persons with tuberculosis to standard therapy suggests that INH preventive therapy would also be effective. Before instituting preventive therapy, clinically active tuberculosis should be excluded.

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TABLE I. Summary—cases specified notifiable diseases, United States

Disease	28th Week Ending			Cumulative, 28th Week Ending		
	July 12, 1986	July 13, 1985	Median 1981-1985	July 12, 1986	July 13, 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	272	202	N	5,599	3,957	N
Aseptic meningitis	214	235	220	2,829	2,566	2,566
Encephalitis: Primary (arthropod-borne & unspec.)	21	33	39	426	513	513
Post-infectious	-	4	1	56	77	55
Gonorrhea: Civilian	17,723	15,229	17,832	446,147	430,956	470,694
Military	289	264	388	8,302	9,864	12,762
Hepatitis: Type A	350	427	361	11,560	11,413	11,413
Type B	502	500	413	13,511	13,360	12,493
Non A, Non B	57	72	N	1,861	2,212	N
Unspecified	72	107	107	2,531	3,027	3,809
Legionellosis	14	18	N	309	361	N
Leprosy	10	8	8	149	207	139
Malaria	18	44	34	464	474	474
Measles: Total*	137	121	33	4,235	2,025	1,993
Indigenous	133	116	N	4,028	1,710	N
Imported	4	5	N	207	315	N
Meningococcal infections: Total	35	43	43	1,556	1,477	1,760
Civilian	35	43	43	1,554	1,471	1,745
Military	-	-	-	2	6	8
Mumps	141	22	25	2,653	1,972	2,147
Pertussis	29	80	36	1,362	968	968
Rubella (German measles)	8	10	13	311	392	699
Syphilis (Primary & Secondary): Civilian	357	491	495	13,433	13,270	15,929
Military	1	2	4	93	96	196
Toxic Shock syndrome	8	9	N	186	214	N
Tuberculosis	412	396	488	11,238	11,021	12,207
Tularemia	3	5	9	53	86	110
Typhoid fever	11	5	5	142	167	191
Typhus fever, tick-borne (RMSF)	25	31	45	303	298	469
Rabies, animal	68	82	107	2,945	2,763	3,421

TABLE II. Notifiable diseases of low frequency, United States

	Cum 1986		Cum 1986
Anthrax	-	Leptospirosis	20
Botulism: Foodborne	5	Plague	2
Infant	27	Poliomyelitis, Paralytic	-
Other	1	Psittacosis (Colo. 1, Calif. 1)	44
Brucellosis	34	Rabies, human	-
Cholera	-	Tetanus (Tenn. 1, Tex. 4)	29
Congenital rubella syndrome	2	Trichinosis (Upstate N.Y. 1)	20
Congenital syphilis, ages < 1 year	11	Typhus fever, flea-borne (endemic, murine) (Tex. 6)	22
Diphtheria	-		

*Two of the 137 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 12, 1986 and July 13, 1985 (28th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	6,599	214	426	56	446,147	430,956	350	502	57	72	14	149
NEW ENGLAND	291	7	14	2	10,594	12,473	8	46	2	4	1	6
Maine	12	-	-	-	481	542	2	4	-	-	-	-
N H	6	-	2	-	261	276	-	-	-	-	-	-
Vt	2	1	2	1	147	153	-	3	2	-	-	-
Mass	164	4	3	-	4,447	4,683	3	29	-	4	1	6
R I	18	2	-	-	886	950	1	4	-	-	-	-
Conn	89	-	7	1	4,372	5,869	2	6	-	-	-	-
MID ATLANTIC	2,580	9	60	6	75,493	65,873	10	37	-	8	-	11
Upstate N Y	242	5	21	4	8,981	8,518	-	11	-	-	-	1
N Y City	1,765	1	13	-	44,397	33,483	-	2	-	6	-	9
N J	401	-	10	-	9,614	10,406	4	8	-	1	-	-
Pa	172	3	16	2	12,501	13,466	6	16	-	1	-	1
E N CENTRAL	382	36	95	8	58,841	60,277	16	46	9	5	1	4
Ohio	67	12	29	2	15,205	14,927	7	16	4	1	1	-
Ind	40	9	16	3	6,581	6,185	1	5	2	3	-	-
Ill	186	4	22	2	16,644	16,637	5	12	-	1	-	3
Mich	71	11	25	1	17,910	16,977	3	13	3	-	-	1
Wis	18	-	3	-	2,501	5,551	-	-	-	-	-	-
W N CENTRAL	119	20	11	8	19,437	21,022	14	17	3	1	1	2
Minn	47	1	7	-	2,711	3,000	3	-	1	-	-	1
Iowa	10	2	4	-	1,956	2,279	-	4	-	-	-	-
Mo	38	3	-	-	9,880	10,115	3	6	2	1	1	-
N Dak	2	-	-	-	173	148	-	-	-	-	-	-
S Dak	1	13	-	-	393	395	3	-	-	-	-	-
Nebr	5	-	-	1	1,372	1,799	4	6	-	-	-	-
Kans	16	1	-	7	2,952	3,286	1	1	-	-	-	1
S ATLANTIC	848	61	61	18	112,181	93,812	43	117	13	11	8	1
Del	14	2	4	-	1,861	2,100	3	5	-	-	-	-
Md	101	7	18	-	13,631	15,001	3	17	1	1	5	-
D C	114	-	-	-	8,763	7,815	-	1	-	-	-	-
Va	85	10	20	1	9,583	9,754	2	16	1	1	1	1
W Va	3	-	9	-	1,216	1,321	2	1	2	-	-	-
N C	38	2	8	1	17,681	17,588	6	12	2	1	1	-
S C	21	-	-	-	10,310	11,521	-	22	-	-	-	-
Ga	138	20	-	1	15,862	-	2	9	1	-	1	-
Fla	334	20	2	15	33,274	28,712	25	34	6	8	-	-
E S CENTRAL	94	12	29	3	36,910	37,393	5	34	1	7	1	1
Ky	17	5	11	1	4,149	4,188	3	11	-	-	1	-
Tenn	53	1	3	1	14,280	14,905	2	12	1	7	-	-
Ala	14	6	14	1	10,485	11,662	-	9	-	-	-	1
Miss	10	-	1	-	7,996	6,638	-	2	-	-	-	-
W S CENTRAL	459	26	52	3	55,059	57,706	24	36	1	10	1	12
Ark	19	-	-	-	5,076	5,583	-	2	-	-	-	-
La	84	2	2	-	9,866	11,604	2	6	-	1	-	1
Okla	26	4	13	-	6,118	6,112	2	5	1	1	1	-
Tex	330	20	37	3	33,999	34,407	20	23	-	8	-	11
MOUNTAIN	186	5	16	1	13,475	14,091	60	31	10	13	1	11
Mont	4	1	-	1	388	382	1	1	-	-	1	-
Idaho	2	-	-	-	452	442	1	-	-	-	-	-
Wyo	4	-	2	-	310	363	1	-	-	-	-	-
Colo	92	1	3	-	3,373	4,284	-	2	2	3	-	3
N Mex	11	-	1	-	1,349	1,585	8	1	-	1	-	-
Ariz	49	-	7	-	4,428	4,122	41	16	6	8	-	5
Utah	8	2	2	-	579	606	5	3	-	1	-	1
Nev	16	1	1	-	2,596	2,307	3	8	2	-	-	2
PACIFIC	1,640	38	88	7	64,157	68,309	170	138	18	13	-	101
Wash	50	2	10	-	4,804	4,891	2	7	3	-	-	12
Oreg	35	-	-	-	2,581	3,309	25	3	-	-	-	-
Calif	1,521	28	76	7	54,469	57,567	142	126	15	13	-	72
Alaska	9	5	2	-	1,545	1,564	1	2	-	-	-	-
Hawaii	25	3	-	-	758	978	-	-	-	-	-	17
Guam	-	-	-	-	91	100	-	-	-	-	-	1
P R	57	-	3	-	1,285	1,931	4	12	-	-	-	7
V I	2	-	-	-	129	267	-	-	-	-	-	-
Pac Trust Terr	-	-	-	-	204	502	11	-	-	-	-	20
Amer Samoa	-	-	-	-	26	-	-	-	-	-	-	1

N: Not notifiable U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 12, 1986 and July 13, 1985 (28th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985
UNITED STATES	464	133	4,028	4	207	2,025	1,556	141	2,653	29	1,362	968	8	311	392
NEW ENGLAND	29	10	69	1	5	119	112	3	48	1	79	46	-	9	9
Maine	1	2	9	-	-	-	23	-	-	-	2	3	-	-	-
N.H.	1	6	34	-	-	-	6	-	12	-	34	23	-	1	2
Vt.	1	-	-	-	-	-	15	-	2	-	3	2	-	1	-
Mass.	15	2	23	1§	4	112	22	3	6	1	23	8	-	4	6
R.I.	4	-	2	-	-	-	15	-	9	-	1	5	-	2	-
Conn.	7	-	1	-	1	7	31	-	19	-	16	5	-	1	1
MID. ATLANTIC	46	35	1,301	-	20	174	250	2	114	1	107	76	-	28	156
Upstate N.Y.	13	-	35	-	19	82	79	1	44	-	70	42	-	20	16
N.Y. City	12	35	368	-	1	47	49	-	5	-	3	9	-	5	117
N.J.	7	-	876	-	-	22	29	-	31	1	9	3	-	3	11
Pa.	14	-	22	-	-	23	93	1	34	-	25	22	-	-	12
E.N. CENTRAL	26	28	695	-	17	457	208	124	1,735	1	200	158	-	24	20
Ohio	7	-	-	-	10	45	84	-	92	-	80	20	-	-	-
Ind.	2	5	7	-	-	34	16	3	29	-	22	11	-	-	-
Ill.	10	23	447	-	3	268	56	110	1,215	-	26	23	-	18	5
Mich.	7	-	31	-	-	52	48	11	230	1	23	21	-	4	14
Wis.	-	-	210	-	4	58	4	-	169	-	49	83	-	2	1
W.N. CENTRAL	13	5	254	-	17	9	79	1	73	2	73	69	-	9	19
Minn.	4	1	43	-	4	4	16	-	1	1	33	16	-	-	2
Iowa	1	4	75	-	1	-	10	-	16	-	9	4	-	1	1
Mo.	4	-	17	-	6	2	26	1	15	-	5	13	-	1	7
N. Dak.	-	-	25	-	1	2	-	-	3	-	3	9	-	-	2
S. Dak.	-	-	-	-	-	-	4	-	1	1	12	1	-	-	-
Nebr.	3	-	-	-	-	-	9	-	-	-	-	4	-	-	-
Kans.	1	-	94	-	5	1	14	-	37	-	11	22	-	7	7
S. ATLANTIC	60	21	429	-	51	220	298	5	135	7	475	195	-	9	42
Del.	1	-	1	-	-	-	2	-	-	2	221	-	-	-	1
Md.	11	-	20	-	9	55	41	2	12	-	99	83	-	-	3
D.C.	-	-	-	-	-	3	4	-	-	-	-	-	-	-	-
Va.	12	1	31	-	24	22	51	-	25	1	20	5	-	-	2
W. Va.	4	-	2	-	-	33	3	-	35	-	10	1	-	-	9
N.C.	4	1	2	-	1	9	49	2	14	3	23	9	-	-	-
S.C.	4	-	274	-	-	-	25	-	11	-	5	-	-	-	3
Ga.	5	-	68	-	14	8	45	1	13	1	76	59	-	-	-
Fla.	19	19	31	-	3	90	78	-	25	-	21	38	-	9	24
E.S. CENTRAL	13	4	49	-	1	2	85	1	21	1	23	13	-	1	2
Ky.	3	-	-	-	-	-	17	-	3	-	1	3	-	1	2
Tenn.	-	4	47	-	1	1	33	1	15	1	6	5	-	-	-
Ala.	6	-	-	-	-	-	24	-	2	-	16	3	-	-	-
Miss.	4	-	2	-	-	1	11	-	1	-	-	2	-	-	-
W.S. CENTRAL	41	20	526	1	29	347	130	-	137	-	97	159	-	52	26
Ark.	-	-	276	-	2	-	19	-	7	-	7	12	-	-	1
La.	4	-	2	-	-	34	17	-	2	-	6	5	-	-	-
Okla.	6	15	25	-	2	-	17	N	N	-	56	91	-	-	1
Tex.	31	5	223	1†	25	313	77	-	128	-	28	51	-	52	24
MOUNTAIN	19	1	274	-	25	478	78	2	191	13	139	48	2	19	4
Mont.	-	-	1	-	7	137	7	-	5	1	7	3	-	1	-
Idaho	1	-	1	-	-	131	2	-	4	4	31	1	-	-	1
Wyo.	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-
Colo.	6	-	2	-	5	6	12	-	11	2	38	16	-	1	-
N. Mex.	1	-	26	-	7	3	6	N	N	-	14	6	-	-	2
Ariz.	7	-	237	-	6	201	16	2	159	1	29	13	-	2	1
Utah	2	-	6	-	-	-	11	-	9	2	16	9	2	12	-
Nev.	2	1	1	-	-	-	22	-	3	3	3	-	-	3	-
PACIFIC	217	9	431	2	42	219	316	3	199	3	169	204	6	160	114
Wash.	18	-	109	-	23	39	46	-	7	1	57	27	-	8	11
Oreg.	14	-	2	-	4	3	22	N	N	-	9	21	-	-	1
Calif.	185	9	301	2†§	14	159	238	3	178	2	95	130	6	150	67
Alaska	-	-	-	-	-	-	9	-	5	-	2	23	-	-	1
Hawaii	-	-	19	-	1	18	1	-	9	-	6	3	-	2	34
Guam	1	-	4	-	1	11	-	-	4	-	-	-	-	2	1
P.R.	4	15	33	-	-	48	3	-	20	-	7	5	-	58	22
V.I.	-	-	-	-	-	10	-	1	12	-	-	-	-	-	-
Pac. Trust Terr.	-	-	-	-	-	-	1	-	5	-	-	-	-	-	-
Amer. Samoa	-	-	2	-	-	-	-	-	1	-	-	-	-	1	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 12, 1986 and July 13, 1985 (28th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985	Cum 1986	Cum 1986	Cum 1986	Cum 1986
UNITED STATES	13,433	13,270	8	11,238	11,021	53	142	303	2,945
NEW ENGLAND	276	289	-	344	371	-	8	5	3
Maine	15	8	-	27	27	-	-	-	-
N.H.	10	6	-	10	14	-	-	-	-
Vt.	6	3	-	11	4	-	-	-	-
Mass.	142	152	-	167	222	-	6	2	-
R.I.	16	7	-	24	32	-	-	2	1
Conn.	87	113	-	105	72	-	2	1	2
MID. ATLANTIC	1,916	1,825	-	2,270	2,012	1	14	10	340
Upstate N.Y.	95	122	-	331	338	-	2	2	36
N.Y. City	1,099	1,133	-	1,157	1,014	-	6	4	-
N.J.	355	368	-	403	252	1	5	1	10
Pa.	367	202	-	379	408	-	1	3	294
E.N. CENTRAL	550	605	2	1,380	1,309	-	9	44	67
Ohio	71	78	-	224	230	-	1	42	5
Ind.	66	61	-	145	165	-	-	-	10
Ill.	294	311	1	615	576	-	2	1	20
Mich.	91	121	1	331	268	-	5	1	15
Wis.	28	34	-	65	70	-	1	-	17
W.N. CENTRAL	128	126	2	319	297	14	5	17	474
Minn.	21	28	-	81	58	-	1	1	53
Iowa	6	14	1	25	41	1	-	1	107
Mo.	69	59	-	157	138	10	4	5	53
N. Dak.	2	2	-	4	3	-	-	-	106
S. Dak.	2	4	-	15	15	2	-	3	101
Nebr.	11	6	-	5	13	1	-	3	14
Kans.	17	13	1	32	29	-	-	4	40
S. ATLANTIC	3,924	3,271	1	2,177	2,278	7	16	128	679
Del.	27	17	-	24	23	-	-	1	-
Md.	246	217	-	156	206	1	4	14	349
D.C.	174	195	-	73	99	-	2	-	-
Va.	209	167	-	190	206	2	4	20	105
W. Va.	11	9	-	63	59	-	2	5	14
N.C.	275	355	-	317	271	1	2	40	4
S.C.	340	413	-	277	305	-	-	39	32
Ga.	637	-	-	320	357	3	-	9	94
Fla.	2,005	1,898	1	757	753	-	2	-	81
E.S. CENTRAL	913	1,068	-	994	976	6	1	36	160
Ky.	44	35	-	245	214	2	-	5	54
Tenn.	334	307	-	299	303	3	-	16	56
Ala.	295	353	-	314	308	1	-	8	49
Miss.	240	373	-	136	151	-	1	7	1
W.S. CENTRAL	2,819	3,277	-	1,400	1,331	22	12	57	452
Ark.	146	171	-	188	148	14	-	2	109
La.	466	576	-	228	195	1	-	-	14
Okla.	74	93	-	123	152	5	1	46	38
Tex.	2,133	2,437	-	861	836	2	11	9	291
MOUNTAIN	326	399	3	255	281	2	7	6	431
Mont.	6	2	-	12	34	-	1	3	153
Idaho	6	3	-	11	14	-	-	-	-
Wyo.	-	6	-	-	5	-	-	1	199
Colo.	81	96	2	18	30	-	1	2	3
N. Mex.	44	62	-	54	55	1	-	-	4
Ariz.	132	205	-	124	117	-	2	-	70
Utah	9	4	-	21	6	1	2	-	-
Nev.	48	21	1	15	20	-	1	-	2
PACIFIC	2,581	2,410	-	2,099	2,166	1	70	-	339
Wash.	52	68	-	108	119	-	3	-	2
Oreg.	57	47	-	70	74	-	-	-	-
Calif.	2,450	2,250	-	1,777	1,802	-	63	-	329
Alaska	1	2	-	33	66	1	1	-	8
Hawaii	21	43	-	111	105	-	3	-	-
Guam	1	2	-	31	27	-	-	-	-
P.R.	442	437	-	165	185	-	4	-	26
V.I.	-	1	-	1	1	-	-	-	-
Pac. Trust Terr.	148	49	-	32	35	-	39	-	-
Amer. Samoa	-	-	-	3	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending July 12, 1986 (28th Week)

Reporting Area	All Causes, By Age (Years): All Ages	≥65	45-64	25-44	1-24	<1	P&I** Total
NEW ENGLAND	694	491	127	37	19	20	60
Boston, Mass	189	106	47	18	8	10	18
Bridgeport, Conn	45	29	7	7	2	-	7
Cambridge, Mass	26	22	4	-	-	-	6
Fall River, Mass	25	19	5	1	-	-	2
Hartford, Conn	63	42	16	2	2	1	8
Lowell, Mass	13	10	3	-	-	-	-
Lynn, Mass	26	20	5	1	-	-	3
New Bedford, Mass	31	21	7	1	1	1	2
New Haven, Conn	42	35	3	2	2	-	4
Providence, R.I.	73	59	9	2	1	2	2
Somerville, Mass	14	10	3	1	-	-	-
Springfield, Mass	47	40	3	1	-	3	3
Waterbury, Conn	38	30	3	1	2	2	2
Worcester, Mass	62	48	12	-	1	1	3
MID ATLANTIC	3,006	1,974	613	273	84	62	149
Albany, N.Y.	67	50	8	2	4	3	4
Allentown, Pa	22	18	4	-	-	-	-
Buffalo, N.Y.	117	80	23	3	6	5	6
Camden, N.J.	45	29	9	4	1	2	3
Elizabeth, N.J.	35	28	6	-	1	-	-
Erie, Pa †	37	27	5	2	3	-	2
Jersey City, N.J.	40	22	11	6	-	1	2
N.Y. City, N.Y.	1,634	1,063	307	183	50	31	78
Newark, N.J.	129	58	42	19	8	2	8
Paterson, N.J.	31	18	8	3	-	2	3
Philadelphia, Pa §	341	230	77	25	3	6	17
Pittsburgh, Pa †	84	53	28	1	-	2	3
Reading, Pa	31	25	5	-	1	-	4
Rochester, N.Y.	141	105	22	10	2	2	9
Schenectady, N.Y.	25	21	4	-	-	-	-
Scranton, Pa †	24	18	5	-	-	1	2
Syracuse, N.Y.	120	70	30	13	4	3	5
Trenton, N.J.	40	24	12	2	1	1	1
Utica, N.Y.	20	16	4	-	-	-	1
Yonkers, N.Y.	23	19	3	-	-	1	1
E.N. CENTRAL	2,464	1,562	546	183	75	98	90
Akron, Ohio	49	32	9	2	2	4	2
Canton, Ohio	35	20	11	3	1	-	1
Chicago, Ill §	564	362	125	45	10	22	16
Cincinnati, Ohio	222	135	56	14	10	7	18
Cleveland, Ohio	204	116	54	19	7	8	6
Columbus, Ohio	92	58	22	8	3	1	1
Dayton, Ohio	112	77	22	5	4	4	1
Detroit, Mich	311	163	76	43	15	14	6
Evansville, Ind	47	35	6	3	-	3	2
Fort Wayne, Ind	56	35	14	2	3	2	1
Gary, Ind	18	10	6	1	-	1	1
Grand Rapids, Mich	78	50	17	3	3	5	8
Indianapolis, Ind	152	100	34	6	3	9	2
Madison, Wis	41	25	7	6	1	2	5
Milwaukee, Wis	157	113	27	7	6	4	8
Peoria, Ill	49	34	7	2	1	5	1
Rockford, Ill	33	27	4	1	-	1	4
South Bend, Ind	61	46	10	4	1	-	1
Toledo, Ohio	117	79	24	5	3	6	4
Youngstown, Ohio	66	45	15	4	2	-	2
W.N. CENTRAL	676	434	141	53	24	24	48
Des Moines, Iowa	63	37	17	6	3	-	4
Duluth, Minn	28	19	5	4	-	-	1
Kansas City, Kans	30	17	7	2	1	3	3
Kansas City, Mo	114	75	23	9	5	2	8
Lincoln, Nebr	39	29	5	3	2	-	7
Minneapolis, Minn	60	35	12	6	2	5	3
Omaha, Nebr	85	56	17	7	3	2	10
St Louis, Mo	137	93	23	9	5	7	6
St Paul, Minn	59	38	13	5	2	1	3
Wichita, Kans	61	35	19	2	1	4	3
S. ATLANTIC	1,232	742	285	107	50	47	30
Atlanta, Ga	110	64	22	16	5	3	2
Baltimore, Md	275	167	68	25	10	5	5
Charlotte, N.C.	101	55	31	5	9	1	5
Jacksonville, Fla	152	95	31	12	6	8	6
Miami, Fla	116	64	29	10	6	6	-
Norfolk, Va	58	30	11	7	1	9	3
Richmond, Va	68	42	21	3	1	1	2
Savannah, Ga	37	23	7	2	2	3	-
St Petersburg, Fla	86	68	13	2	-	3	4
Tampa, Fla	64	37	14	6	2	5	2
Washington, D.C.	150	87	35	18	7	3	1
Wilmington, Del	15	10	3	1	1	-	-
E.S. CENTRAL	666	411	161	41	33	20	32
Birmingham, Ala	103	64	26	6	5	2	3
Chattanooga, Tenn	36	24	10	1	1	-	4
Knoxville, Tenn	66	46	9	6	2	3	3
Louisville, Ky	72	45	20	2	3	2	4
Memphis, Tenn	155	80	40	15	11	9	6
Mobile, Ala	52	33	12	3	4	-	4
Montgomery, Ala	48	27	13	3	2	3	2
Nashville, Tenn	134	92	31	5	5	1	6
W.S. CENTRAL	1,430	842	318	146	73	51	59
Austin, Tex	67	46	6	9	6	-	5
Baton Rouge, La	39	25	9	4	1	-	3
Corpus Christi, Tex	50	32	13	1	2	2	2
Dallas, Tex	206	122	31	26	19	8	5
El Paso, Tex	58	33	14	3	5	3	4
Fort Worth, Tex	73	40	20	11	-	2	6
Houston, Tex	332	178	96	33	13	12	9
Little Rock, Ark	62	36	15	4	4	3	5
New Orleans, La	174	109	34	22	5	4	-
San Antonio, Tex	215	127	47	25	9	7	9
Shreveport, La	51	36	7	2	2	4	4
Tulsa, Okla	103	58	26	6	7	6	7
MOUNTAIN	742	467	137	71	29	36	24
Albuquerque, N Mex	93	57	14	10	5	5	3
Colo Springs, Colo	38	26	9	1	2	-	3
Denver, Colo	137	99	20	5	3	10	5
Las Vegas, Nev	94	49	26	16	1	2	2
Ogden, Utah	25	17	4	3	1	-	2
Phoenix, Ariz	161	99	32	16	6	8	3
Pueblo, Colo	22	17	2	3	-	-	1
Salt Lake City, Utah	55	26	11	7	7	4	2
Tucson, Ariz	117	77	19	10	4	7	3
PACIFIC	1,923	1,236	350	192	94	45	103
Berkeley, Calif	23	15	4	1	3	-	-
Fresno, Calif	79	51	12	6	8	2	5
Glendale, Calif	24	22	1	1	-	-	-
Honolulu, Hawaii	73	42	18	7	4	2	7
Long Beach, Calif	51	32	13	3	1	2	3
Los Angeles, Calif	655	414	117	80	27	12	22
Oakland, Calif	26	19	4	1	1	1	4
Pasadena, Calif	30	24	2	-	2	2	1
Portland, Oreg	108	77	18	9	3	1	3
Sacramento, Calif	150	92	30	16	7	5	14
San Diego, Calif	127	80	24	11	9	3	16
San Francisco, Calif	167	104	31	20	10	2	8
San Jose, Calif	152	86	36	17	9	3	10
Seattle, Wash	153	106	25	15	4	3	2
Spokane, Wash	49	33	7	1	4	4	3
Tacoma, Wash	56	39	8	4	2	3	5
TOTAL	12,833††	8,159	2,678	1,103	481	403	595

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Table V. Estimated years of potential life lost before age 65 and cause-specific mortality, by cause of death — United States, 1984

Cause of mortality (Ninth Revision ICD)	Years of potential life lost by persons dying in 1984*	Cause-specific mortality† (rate/100,000)
ALL CAUSES (Total)	11,761,000	866.7
Unintentional injuries§ (E800-E949)	2,308,000	40.1
Malignant neoplasms (140-208)	1,803,000	191.8
Diseases of the heart (390-398, 402, 404-429)	1,563,000	324.4
Suicide, homicide (E950-E978)	1,247,000	20.6
Congenital anomalies (740-759)	684,000	5.6
Prematurity¶ (765, 769)	470,000	3.5
Sudden infant death syndrome (798)	314,000	2.4
Cerebrovascular diseases (430-438)	266,000	65.6
Chronic liver diseases and cirrhosis (571)	233,000	11.3
Pneumonia and influenza (480-487)	163,000	25.0
Chronic obstructive pulmonary diseases (490-496)	123,000	29.8
Diabetes mellitus (250)	119,000	15.6

*For details of calculation, see footnotes for Table V, *MMWR* 1986;35:27.

†Cause-specific mortality rates as reported in the MVSR are compiled from a 10% sample of all deaths.

§Equivalent to accidents and adverse effects.

¶Category derived from disorders relating to short gestation and respiratory distress syndrome.

Perspectives in Disease Prevention and Health Promotion

Premature Mortality due to Malignant Neoplasms — United States, 1983

In 1984, malignant neoplasms* ranked as the second leading cause of years of potential life lost before age 65 (YPLL) (*1*) (see Table V). They accounted for 1.8 million YPLL, or 15% of the total of YPLL from all causes. In this report, YPLL was calculated with detailed mortality

*International Classification of Diseases, Ninth Revision, 140-208.

Malignant Neoplasms — Continued

data from computer tapes of the National Center for Health Statistics for 1979-1983, the latest years for which tapes are available. Data were analyzed on YPLL attributable to all malignant neoplasms, as well as site-specific malignant neoplasms, by sex, race (white, black, other races), and year. To compare differences in YPLL across time and among different race/sex groups, independent of changes and differences in population size, YPLL rates per 100,000 persons under 65 years of age were calculated (*2*).

All malignant neoplasms. In 1983, malignant neoplasms among white males accounted for 43% of the total YPLL attributable to malignant neoplasms (Table 3). Malignant neoplasms among white females accounted for another 41%. Black males, however, had the highest YPLL rate due to malignant neoplasms in 1983 (1,130/100,000), followed by black females (937/100,000), white males (889/100,000), and white females (842/100,000). The percentage of total YPLL attributable to malignant neoplasms and the YPLL rate due to malignant neoplasms did not change markedly in 1979-1983 for the six race/sex groups.

Site-specific neoplasms. Respiratory-system cancers in 1983 accounted for 24% of all YPLL due to malignant neoplasms, followed by digestive-system cancers (17%), breast cancer (12%), and cancers of other and unspecified sites (19%). Although these four sites also accounted for more than 70% of the deaths from malignant neoplasms among persons under 65 years of age, their rank order based on percentage of deaths differed from that based on YPLL: respiratory system cancers accounted for 31% of all deaths; digestive system cancers, 21%; breast cancer, 11%; and cancers of other and unspecified sites, 14%.

YPLL rates for males exceeded comparable rates for females by at least 40% for all sites except breast and genital cancers (Table 4). Similarly, death rates for males under 65 years of age also exceeded comparable female rates by at least 40% for these same sites.

YPLL rates for blacks of both sexes exceeded comparable rates for whites by at least 10% for all malignant neoplasms except hematologic and lymphatic cancers (leukemia, lymphoma, and multiple myeloma) and cancers of other and unspecified sites (Table 5). For those under 65 years of age, black death rates exceeded comparable white death rates by at least 10% only for four sites: lip, oral cavity, and pharynx; digestive system; respiratory system; and genital organs. Black YPLL rates for breast cancer and cancer of the urinary organs exceeded comparable white YPLL rates, but black death rates for these cancers were 7% and 15% lower, respectively, than comparable white death rates.

Reported by Chronic Disease Control Div, Center for Environmental Health, CDC

Editorial Note: As an underlying cause of death, malignant neoplasms ranked second in the United States in 1983, accounting for 442,986 deaths, or about 22% of all deaths (*3*). Of these deaths, 36% occurred among persons under 65 years of age. In 1986, 472,000 cancer deaths are expected to occur among U.S. residents, 54% among males. Almost 1.4 million

TABLE 3. Years of potential life lost before age 65 years (YPLL) due to malignant neoplasms, by sex and race — United States, 1983

Race	Male YPLL			Female YPLL			Total YPLL		
	Total	(%)	Rate*	Total	(%)	Rate*	Total	(%)	Rate*
White	776,609	(43)	889	735,901	(41)	842	1,512,510	(84)	866
Black	140,200	(8)	1,130	126,088	(7)	937	266,288	(15)	1,030
Other	15,829	(1)	537	15,817	(1)	520	31,646	(2)	529
All	**932,638**	**(52)**	**908**	**877,806**	**(49)**	**845**	**1,810,444**	**(100)**	**876**

*Per 100,000 persons under 65 years of age.

Malignant Neoplasms — Continued

newly diagnosed cancer cases are expected, about one-third of which would be due to nonmelanotic skin cancers and carcinomas *in situ*. For a child born in 1985, the probability at birth of eventually developing cancer (excluding nonmelanotic skin cancers) is about 33%, and the probability of eventually dying of cancer, about 20% (*4*).

Because over one-third of cancer deaths occur among persons under 65 years of age, cancer retains its importance as a cause of death when ranked either by summary death rates, which emphasize mortality at older ages, or by YPLL, which emphasizes mortality at younger ages (*5,6*). For all malignant neoplasms, males have higher death rates for persons under 65 years of age and higher YPLL rates than females; blacks have higher death rates and YPLL

TABLE 4. Years of potential life lost before age 65 years (YPLL), YPLL rates per 100,000 population under 65 years, and YPLL rate ratios, by nine specific groups of malignant neoplasms and by sex — United States, 1983

Malignant neoplasm group	Total YPLL	YPLL rate	YPLL rate ratio*
Lip, oral cavity, and pharynx			
Male	28,847	28.1	
Female	11,332	10.9	2.6
Digestive organs and peritoneum			
Male	186,769	182.7	
Female	127,710	122.9	1.5
Respiratory and intrathoracic organs			
Male	287,446	279.8	
Female	144,095	138.7	2.0
Breast			
Male	810	0.8	
Female	214,104	206.1	0.004
Genital organs			
Male	31,324	30.5	
Female	110,168	106.1	0.3
Urinary organs			
Male	33,168	32.3	
Female	17,347	16.7	1.9
Leukemia			
Male	83,694	81.5	
Female	59,820	57.6	1.4
Lymphoma and multiple myeloma			
Male	76,300	74.3	
Female	47,157	45.4	1.6
Other and unspecified sites			
Male	203,370	198.0	
Female	146,073	140.6	1.4

*For males compared with females within each site-specific category.

Malignant Neoplasms — Continued

rates than whites or other races. Differences in exposures to risk factors (e.g., cigarette smoking, occupation) and biological differences (e.g., hormonal effects, immunity) may account for the sex differences. For almost all cancers except those with notably poor survival rates,

TABLE 5. Years of potential life lost before age 65 years (YPLL), YPLL rates per 100,000 population under 65 years, and YPLL rate ratios, by nine specific groups of malignant neoplasms and by race — United States, 1983

Malignant neoplasm group	Total YPLL	YPLL rate	YPLL rate ratio*
Lip, oral cavity, and pharynx			
White	27,733	15.9	1.0
Black	10,926	42.2	2.7
Other	1,520	25.4	1.6
Digestive organs and peritoneum			
White	251,070	143.7	1.0
Black	55,636	215.1	1.5
Other	8,683	145.1	1.0
Respiratory and intrathoracic organs			
White	361,452	206.8	1.0
Black	65,730	254.1	1.2
Other	4,359	72.8	0.4
Breast			
White	181,987	104.1	1.0
Black	29,852	115.4	1.1
Other	3,075	51.4	0.5
Genital organs			
White	115,440	66.1	1.0
Black	23,387	90.4	1.4
Other	2,665	44.5	0.7
Urinary organs			
White	42,694	24.4	1.0
Black	7,149	27.6	1.1
Other	672	11.2	0.5
Leukemia			
White	122,976	70.4	1.0
Black	16,979	65.6	0.9
Other	3,559	59.5	0.8
Lymphoma and multiple myeloma			
White	105,854	60.6	1.0
Black	15,683	60.6	1.0
Other	1,920	32.1	0.5
Other and unspecified sites			
White	303,304	173.6	1.0
Black	40,946	158.3	0.9
Other	5,193	86.8	0.5

*For blacks or other races compared with whites within each site-specific category.

Malignant Neoplasms — Continued

whites have a better chance of survival after diagnosis than blacks (*7,8*). White patients have tended to be somewhat older at diagnosis than blacks and to have higher percentages of cancers diagnosed while localized.

For specific sites, however, this ranking changes. The category cancers of other and unspecified sites ranks higher than digestive system cancers when ranked by YPLL but lower when ranked by death rates. Cancers of the bone, connective tissue, skin, and nervous system—prevalent cancers of childhood and young adulthood—probably account for this difference.

The higher YPLL rates but lower death rates for breast and urinary-organ cancers for blacks compared with whites may indicate that younger blacks with these cancers are not surviving as long after diagnosis as whites of comparable age. In one study, 5-year relative survival rates for both breast and urinary-bladder cancers were markedly better for whites than for blacks, only partly because whites had higher percentages of localized cancers (*7*). Even among those with localized cancers, relative survival rates for whites exceeded those for blacks. This study, however, considered patients of all ages, not just those under 65 years of age.

Different malignant neoplasms may have similar or different causes (*9,10*). Diet, tobacco use, infection, exposure to sunlight, reproductive and sexual behavior, occupation, and alcohol use are risk factors associated with more than 80% of all cancer deaths (*10*). These risk factors are important among persons under 65 years of age, as well as older persons. Only a few cancers found in those under 65 years—childhood cancers, young-adult Hodgkin's disease, premenopausal breast cancer, and cancers associated with specific genetic disorders—are likely to have different sets of causes from malignant neoplasms in those 65 years of age or older. Therefore, preventive measures (e.g., stopping cigarette smoking, making available cervical cytology screening services) should reduce both premature and total mortality from malignant neoplasms (*11*).

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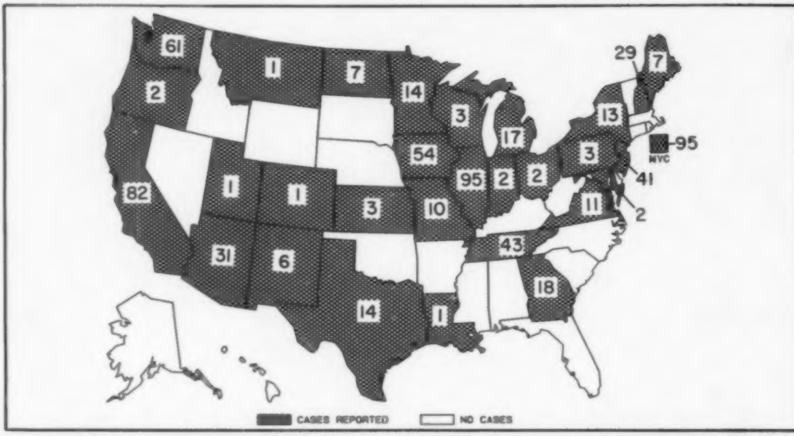
Erratum: Vol. 35, No. 25

p. 408 In the article, "*Bacillus cereus* — Maine," the first sentence of the Editorial Note on p. 409 should begin, "*B. cereus* is an *aerobic*, spore-forming, gram-positive rod. . . ." Also, in the second sentence of the second paragraph in the Editorial Note, *Campylobacter perfringens* is incorrect; it should be *Clostridium perfringens*.

FIGURE I. Reported measles cases — United States, weeks 24-27, 1986



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The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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